CUSTOMER NO.: 24498
Serial No.: 09/841,140
Notice of Appeal dated: 09/26/06
Response due: 11/26/06

PATENT
PU010005

Amendments to the Drawings

A replacement sheet showing Fig. 1 is enclosed to correct certain inconsistencies between the specification and original Fig. 1.

Remarks/Arguments

No claims have been allowed.

I. The Rejections

(a) Claims 1-2, 4-8, 11-15 and 19 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Desai et al (US 6034746) in view of Chen et al. (US 5917830).

(b) Claims 3, 9-10, 16-18 and 20 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Desai et al (US 6034746) in view of Chen et al. (US 5917830) and further in view of Sakamoto et al. (US 6026164).

2. The Response

(a) Basis for Rejections Under 35 U.S.C. § 103(a)

To establish a prima facie case of obviousness, three basic criteria must be met. First, the prior art reference (or references when combined) must teach or suggest all of the claim limitations. Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the teachings of a plurality of references. Finally, there must be a reasonable expectation of success. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on the applicant's own disclosure. *In re Vaeck*, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991).

The Federal Circuit Court of Appeals has made it clear that patent examiners cannot rely on their own knowledge as a basis for rejecting patent applications without the citation of specific evidence (references) having a teaching, suggestion or motivation to modify a reference or to combine two or more references . See *In re Lee*, 277 F.3d 1338, 1345 (Fed. Cir. 2002).

In a long line of cases, the Federal Circuit has specified that obviousness can be shown only when prior art of record provides a "suggestion or incentive", *ACS Hospital Systems, Inc. v. Montefiore Hospital*,

732 F.2d 1572, 1577 (Fed. Cir. 1984), "teaching, suggestion or incentive", *In re Geiger*, 815 F.2d 686, 688 Fed. Cir. 1987), "reason suggestion or motivation", *In re Oetiker*, 977 F.2d 1443, 1447 (Fed. Cir. 1992), or "teaching, suggestion or motivation", *In re Raynes*, 7 F.3d 1037, 1039 (Fed. Cir. 1993) to combine existing elements from different sources.

This firm rule, that an Examiner cannot reject claims as obvious unless he can point to specific references suggesting that elements could be combined or modified, has been repeated many times by the Federal Circuit. See *In re Dembiczak*, 175 F.3d 994, 999; *Ruiz v. A. B. Chance Co.*, 234 F. 3d 654,665 (Fed. Cir. 2000); *In re Kotzab*, 217 F.3d 1365, 1371 (Fed. Cir. 2000); *In re Rouffet*, 149 F.3d 1350, 1357 (Fed. Cir. 1998).

It is respectfully submitted that the Examiner is required to find each and every element of the claims in citable references and, most importantly, to find such references which teach, suggest and/or motivate the person of ordinary skill to combine such elements in the manner set forth in the rejected claims. Absent the elements or the showing of a teaching, suggestion or motivation to combine such elements, an obviousness rejection cannot stand.

The Examiner bears the burden of establishing a prima facie case of obviousness and "can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references." *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988, emphasis added). To support a conclusion that a claimed combination is obvious, either: (a) the references must expressly or impliedly suggest the claimed combination to one of ordinary skill in the art, or (b) the examiner must present a convincing line of reasoning as to why a person of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972, 973 (Bd. Pat. App. & Inter. 1985).

(b) The Rejection of claims 1-2, 4-8, 11-15 and 19 Based on Desai in view of Chen

As indicated by the Examiner, Desai describes combining encoded data representing a first (higher resolution or main) video program with encoded data representing a second (lower resolution) video program such as a commercial. However, Desai goes about doing this task in a significantly different way than Applicant's claimed invention. In Desai, (see col. 5, lines 1-4), it is stated:

> "To allow for insertion of commercial data, the distributor of a movie provides control information, including a commercial insert file, and one or more data files, along with the movie". Furthermore, Desai (col. 5, line 23) states:
>
> 'When a client (e.g. client 10 in FIG. 1) requests an audio/video asset, a play list is typically constructed by a controller (e.g., controller 16 in FIG. 1). The play list is used to control which data is sent, and in what order the data is sent, from data pump 18 to client 10. The commercial insert file and the data files allow a play list to be constructed such that the movie is played with commercials".
>
> At column 2, lines 39 – 40, Desai states:
> "The original audio/video data stream is played until an insert point is reached. The additional data is then played" (emphasis added).

Thus, the "distributor" adds certain "commercial insert" files "along with the movie" so that the entire data stream of movie, commercials and one or

more data files is made up in Desai by the distributor before the single data stream is provided from the source to the "client" in sequence.

In the Final Rejection, the Examiner acknowledges, referring to specific attributes recited in the rejected claims, that "Desai fails to disclose simultaneously receiving and seamlessly incorporating the first and second video streams" into "packetized data" as required by each of rejected claims 1 – 8 and 19 or into "a single datastream" as required by each of rejected claims 19 – 20. In fact, Desai clearly states (col. 2, line 39) "The original audio/video data stream is played until an insert point is reached. The additional data is then played.", clearly indicating there are no "first and second video streams".

It should also be noted that dependent claims 11 – 15, which are dependent on claim 9 (see below), also include "simultaneously" and "seamlessly" since similar language ("simultaneous" and "seamlessly") was also incorporated into independent method claim 9 earlier. Therefore, claims 9 – 18, as well as 19 and 20 are submitted to distinguish over Desai as well. This deficiency is not made up by Chen (see below).

The Examiner seeks to bridge this gap by relying upon Chen et al. (newly cited in the Final Rejection). Chen describes "a method and apparatus ---- for splicing a secondary packetized data stream, such as a commercial, with a primary packetized data stream, such as a network television program ------ (which method) is particularly suitable for use at a cable system headend." (col. 2, lines 11 – 17).

The Examiner concluded that "it would have been obvious ----- to take the apparatus disclosed by Desai and add the processing taught by Chen in order to obtain an apparatus that operates more efficiently by reducing the time needed to insert commercials into a stream" (Final Rejection, middle of page 3).

However, the Examiner has not demonstrated that there is any motivation for a person of ordinary skill to combine anything from these two references. Reducing the time needed to insert commercials into a stream is not seen to be a stated objective of any of these references or of the present invention. Furthermore, the Examiner has not identified "the processing taught

by Chen" that could or would be suitable to add to Desai in order to arrive at the presently claimed combination(s).

In fact, Chen never mentions that he is dealing with low definition and high definition data streams. At col. 4, line 48, Chen specifically states:

> "When the television program is in an MPEG – 2 or similar format, the DAIM (Digital Ad Insertion Module) maintains compliance with the MPEG – 2 protocol.".

Thus, Chen describes MPEG-2 (high definition) data for both the program and ads, not high and low definition streams.

Neither Chen nor Desai discloses or infers any solution to any problem that the other may have. The necessary elements for combining references are simply not met with respect to these two references.

It is respectfully submitted that the Examiner is required to find each and every element of the claims in citable references and, most importantly, to find such references which teach, suggest and/or motivate the person of ordinary skill to combine such elements in the manner set forth in the rejected claims. Absent elements of the claims and any showing of a teaching, suggestion or motivation to combine the references, an obviousness rejection cannot stand.

The rejection of each of these thirteen claims based on Desai in view of Chen should therefore be withdrawn.

(c) The rejection of claims 3, 9-10, 16-18 and 20 based on Desai in view of Chen and further in view of Sakamoto

The third reference, Sakamoto et al., is relied on against claims 3, 9-10, 16-18 and 20 on the basis that Sakamoto discloses "upconverting the decoded second resolution data" (Rejection, page 4).

Only dependent claims 3 and 10 include "upconverting". It is submitted, therefore, that the Examiner has not pointed out anything in Sakamoto which is even relevant to claims 9, 10, 16-18 and 20.

In addition, Sakamoto does not disclose any of the features of the

present claims pointed out above in distinguishing this invention over Desai and/or Chen. It should be noted that Sakamoto describes significantly different arrangements for transmitting and decoding a plurality of entire encrypted datastreams for Pay TV, which is not relevant to the presently claimed invention.

In the citation of Sakamoto, the Examiner notes that reference "teaches that it is difficult to effect scrambling without changing the code length (Sakamoto, col. 2, lines 1-3)". This statement is totally unrelated to the presently claimed invention and relates only to the fact that Sakamoto is concerned with "a communication processing system ---- which performs a scrambling process on digital television signals and broadcast (sic) them, and more particularly to pay broadcasting techniques" (Sakamoto, col. 1, lines 16-19).

Sakamoto describes his system beginning at col. 7, line 65, as one in which "low quality layer data S2 and high quality layer data S3 are encrypted and then transmitted, the images cannot be viewed unless not only the layer decoding unit 134 but also the decrypting units 133a and 133b are provided on the reception apparatus side". As part of his pay TV encryption scheme, Sakamoto uses an "HDTV signal which undergoes a ½ down sampling process at a down sampling circuit 221 and is sent to an SDTV (Standard Definition TV) compression layer encoder 23" (col. 8, line 50).

Thereafter, the video signal subjected to the compression process at the SDTV encoder 23 is supplied to the HDTV encoder 22 (see col. 9, lines 5-8). The SDTV compressed signal is subjected to a twice up sampling process at an up sampling circuit 222.

This sequence of, first, down sampling an HDTV signal to produce a low quality (actually corrupted and almost unviewable) signal that may be previewed by a pay-TV non-subscriber, and then up sampling the low quality signal to use it in processing the low quality signal for "previewing", has no relationship whatsoever to the presently claimed invention (or to either of the other two cited references). There is only one program stream in Sakamoto. There are no "first video program" and "second video program".

The Examiner's conclusion that Sakamoto "taught" "upconverting to obtain an apparatus that operates more efficiently by being able to scramble the data and keep the code length constant", if correct, is without meaning in connection with the presently claimed invention. Furthermore, that statement is not contained in Sakamoto and is therefore not part of the "prior art".

It should be noted that Sakamoto is only concerned with different levels of resolution of a single video transmission (image sequence), not with simultaneously transmitted different image sequences transmitted at different resolutions which are then seamlessly combined.

It is respectfully requested that the rejection of claims based on the combination of Desai in view of Chen and further in view of Sakamoto be reconsidered and withdrawn.

The action does not make out a prima facie case of obviousness with respect to any of the rejected claims.

There is clearly no objective teaching in the cited references that would lead an individual of ordinary skill to somehow combine Desai and Chen with Sakamoto to arrive at Applicant's claimed combinations. Under the law applied in obviousness rejections, the Examiner's rejection should be withdrawn (In re Fine, supra).

3. Additional Amendments to Claims and Drawing

(a) Claims

Each of dependent claims 2, 11 and 18 and independent claim 19 has been further amended to recite a "buffer", as was the case with previous dependent claim 16. In each of claims 2, 11, 18 and 19 the buffer is stated to be "a buffer which holds and outputs sufficient video data to match the time for switching --- video streams ---". This buffer is described in the original specification (and claim 16) but is not found in the cited references.

(b) Drawing

A replacement sheet showing Fig. 1 is enclosed to correct certain inconsistencies between the specification and original Fig. 1.

Specifically, a reference character 121 associated with the "DECODER" at the lower right corner of Fig. 1 has been changed to "131" consistent with the specification at page 9, line 3. The reference character "121" was already applied to the "SD ENCODER" in Fig. 1.

In addition, an arrow head pointing into SATELLITE 115 at the upper end of a line extending from IRD 130 to SATELLITE 115 was removed and an arrow head at the opposite end of that line was added pointing into IRD 130 (see specification, page 8, lines 7 – 10).

Entry of this corrected drawing sheet is requested to correct obvious errors.

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4. Conclusion

Independent claims 1, 9 and 19 each include distinguishing features as pointed out above which are not found in the cited references or any combination of those references. The amendments to claims 2, 11, 18 and 19 further clarify a distinguishing feature of the invention.

In view of the foregoing Remarks, reconsideration and withdrawal of all of the rejections and allowance of all pending claims 1 – 20 are respectfully requested.

Respectfully submitted,

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Attachment: Replacement Sheet of Figure 1

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